

WHAT IS CLAIMED IS:

1. A method for treating an air filter, comprising
/ applying a water-soluble dielectric liquid formulation
onto the air filter.
2. The method of claim 1, wherein liquid formulation is
selected to be non-flammable and non-combustible.
3. The method of claim 1, wherein the formulation further
includes a dielectric biocide material.
4. The method of claim 1, wherein the formulation is a
non-ionic surfactant.
5. The method of claim 4, wherein the non-ionic
surfactant is an alkylphenol-hydroxypolyoxyethylene
polymer.
6. The method claim 5, wherein the alkylphenol-
hydroxypolyoxyethylene polymer is alkylphenol-hydroxy
(xyethylene)_{35,45 or 100}.
7. The method of claim 1, wherein the formulation is
selected from the group consisting of mono or
polyhydric alcohols, mono or polyethers, and mono or
polyketone compounds.

8. The method of claim 7, wherein the polyhydric alcohol is one of propylene glycol and glycerin.
9. The method of claim 1, wherein a non-ionic biocide material is added to the formulation.
10. The method of claim 1, wherein the formulation is a non-ionic surfactant dissolved in a non-flammable, non-combustible solvent.
11. The method of claim 10, wherein the formulation is non-flammable and non-combustible.
12. The method of claim 10, wherein the non-ionic surfactant is an alkylphenol-hydroxypolyoxyethylene polymer.
13. The method of claim 12, wherein the alkylphenol-hydroxypolyoxyethylene polymer is alkylphenol-hydroxy (xyethylene) _{35,45, or 100}.

14. The method of claim 1, wherein the formulation is selected from the group consisting of mono- or polyhydric alcohols, mono- or polyethers, or mono or polyketone compounds dissolved in a non-flammable solvent that leaves no conducting residue on the filter.
15. The method of claim 14, wherein the formulation is glycerin or propylene glycol dissolved in a non-flammable solvent that leaves no conducting residue on the filter
16. The method of claim 14, wherein the formulation is a non-ionic surfactant dissolved in the non-flammable solvent that leaves no conducting residue on the filter.
17. The method of claim 16, wherein the non-ionic surfactant is alkylphenol-hydroxypolyoxyethylene polymer.
18. The method of claim 11, wherein the alkylphenol-hydroxypolyoxyethylene polymer is alkylphenol-hydroxy (xyethylene)_{35,45 or 100}.

19. The method of claim 10, wherein the formulation is selected from the group consisting of mono or polyhydric alcohols, mono or polyethers, or mono or polyketone compounds dissolved in the non-flammable solvent that leaves no conducting residue on the filter.
20. The method of claim 19, wherein the formulation is of glycerin or propylene glycol dissolved in the non-flammable solvent that leaves no conducting residue on the filter.
21. The method of claim 3, wherein the formulation is a non-ionic surfactant.
22. The method of claim 21, wherein the non-ionic surfactant is alkylphenol-hydroxypolyoxyethylene polymer.
23. The method of claim 21, wherein the alkylphenol-hydroxypolyoxyethylene polymer is alkylphenol-hydroxy(xyethylene) _{35,45 or 100}.

24. The method of claim 2, wherein the formulation is selected from the group consisting of mono or polyhydric alcohol, mono or poly ether, and mono or polyketone compounds.

25. The method of claim 21, wherein the polyhydric alcohol is propylene glycol or glycerin.

26. The method of claim 3, wherein the non-ionic biocide is a polychlorophenoxyphenol.

27. The method of claim 26, wherein the polychlorophenoxyphenol is one of 3-(4-chlorophenyl)-1-(3,4-dichlorophenyl)urea and 2,4,4'-trichloro-2'-hydroxydiphenyl.

28. A formulation for improving filter performance, comprising non-ionic, water-soluble dielectric and biocide components applicable onto a filter.

29. The formulation of claim 28, wherein the water-soluble dielectric component is glycerin dissolved in deionized water.

30. The formulation of claim 28, wherein the dielectric compound is propylene glycol dissolved in deionized water.
31. The formulation of claim 28, wherein the components selected so as to be are non-flammable and non-combustible.
32. The formulation of claim 28, wherein the water-soluble dielectric component is a non-ionic surfactant.
33. The formulation of claim 32, wherein the non-ionic surfactant is an alkylphenol-hydroxypolyoxyethylene polymer.
34. The formulation of claim 33, wherein the alkylphenol-hydroxypolyoxyethylene polymer is alkylphenol-hydroxy (xyethylene)_{35,45 or 100}.
35. The formulation of claim 28, wherein the water-soluble dielectric compound is selected from the group consisting of mono or polyhydric alcohols, mono or polyethers, and mono or polyketone compounds.
36. The formulation of claim 35, wherein the polyhydric alcohol is one of propylene glycol and glycerin.

37. A formulation for treating a filter, comprising a water-soluble liquid component selected so that, upon applying the formulation to the filter, passive electrostatic properties are impartable to the filter.

38. The formulation of claim 37, wherein the liquid component is selected to be non-flammable and non-combustible.

39. The formulation of claim 37, wherein the liquid component is a non-ionic surfactant.

40. The formulation of claim 39, wherein the non-ionic surfactant is an alkylphenol-hydroxypolyoxyethylene polymer.

41. The formulation of claim 40, wherein the alkylphenol-hydroxypolyoxyethylene polymer is alkylphenol-hydroxy (xyethylene)_{35,45 or 100}.

42. The formulation of claim 37, wherein the liquid component is selected from the group consisting of mono or polyhydric alcohols, mono or polyethers, and mono or polyketone compounds.

43. The formulation of claim 42, wherein the polyhydric alcohol is one of propylene glycol and glycerin.
44. The formulation of claim 37, wherein a non-ionic biocide material is added to the formulation.
45. The formulation of claim 37, wherein the liquid component is a non-ionic surfactant dissolved in a non-flammable, non-combustible solvent that leaves no conducting residue on the filter.